April , 1984

$1 00 price

# SINCLAIR USERS GROUP

THE NEWSLETTER OF THE

# Victoria Sync Association

## How to make your IBM run

## CHANGING TIMES

As was mentioned in the last newsletter, the inevitable has begun to happen, and some of us have started acquiring new computers. The ZX81 or Timex 1000 was for most of us our first computer, and will probably remain an object of love for some time. However it will eventually pass out of production, and we will all be on to the next generation. Timex has announced it is going out of the business, while Sinclair in England has just unveiled a mouthwatering new product, the QL (Quantum Leap), which we are told will be selling in North America later this year for $500 US.

Any computer group which sticks resolutely to only recognizing one model of computer is fated to obscurity in time, so it behooves us to open discussion on the future of the club. Clearly we will have to start supporting other machines as well as the ZX81/TS1000, and the question is which ones? How wide should we spread our attentions?

We should have no intention of abandoning the 81/1000's. Most of us still have a great deal to learn about them, and will want to keep learning for some time. But we will want to take on some new machines as well. One obvious route is to stay with the Sinclair family; another is to branch out into other makes, staying with modestly priced machines. Perhaps we will do both.

It has been suggested that we might make overtures to other computer groups about joint meetings, and reciprocal memberships. This would enable our members who also own other machines to attend sessions on those machines while the rest of us continue to milk the maximum out of our Sinclairs. It would also give the rest of us the opportunity to see what else is going on in the world of tiny computing.

I personally would encourage the idea of joint meetings, on either a regular or itinerant basis, with groups like the Vancouver Island MicroComputer Society. We could, for example, take side-by-side classrooms in a school one evening, and move back and forth.

Perhaps this approach would be a good way of providing our members with the benefits of branching out, without actually watering down our own efforts in support of our main machine. This would be a valuable topic to throw around at the upcoming meeting.

On the subject of our own meetings, I would like to suggest that we try and have a Basic tutorial session scheduled for every meeting. It need not involve everyone, but I strongly suspect that there are few of us who would not listen in anyway, to pick up some tips. It will probably mean dragooning members to stand up and give us 5 or 10 minutes of what they have discovered or learned on their own. Noone will be spared!

Julian Greenwood.

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✳ **NOTICE OF NEXT MEETING** Thurs. Apr. 12, 1984, Bee-Gee's 7:PM

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**UNREPORT OF UNMEETING:** Sec's Report, March 8, 1984.

Our last monthly meeting at Bee-Gee's was of a style we should follow more often. We did not have a business meeting. Our President Dave Skaalrud had just resigned, our V-P was in California, Director Karen Petts was unavailable, I was late, Director Bob Clark expected to be late. In the result Director Stu Montgomery drew the short straw and had to work double duty. He called us to order (to start an informal forum), and soon afterwards had to leave to go on to his job.

Of most significance to me was that members were first interested in Dave's resignation, and secondly in the news of Timex' retirement from computers. These were emotional concerns. The forum was open for <u>any</u> topic, but software enquiries and programming help took a back seat.

Computing is a human activity, and we should not forget that! Reflecting on that I think that some members may feel themselves in need of some discreet help in showing their desire to learn. Perhaps those that have specific questions could put them in writing at the meetings so that we can discuss them in front of the membership.

The Directors met and appointed Julian Greenwood to fill the interim vacancy on the Board left by the shift of Dave Curry to President. Stu Montgomery is in the process of being railroaded to V-P, but he missed the meeting!

Dee.

*The REGISTERED ADDRESS of the Victoria Sync Association is 942 Cloverdale Ave., Victoria, B.C., V8X 2T6.*

| | | |
|---|---|---|
| *President* | *David Curry* | *743-9260* |
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| *Displays* | *Alison Gunn* | *479-8618* |
| *Machine Code* | *Dale Bird* | *592-5058* |
| *Librarians* | *Dave Curry* | *743-9260 (Cobble Hill)* |
| | *David Skaalrud* | *656-5879 (Royal Oak)* |
| *Newsletter* | *Dee Shoolingin* | *388-5464 #107 (msg.)* |

*Membership is $10.00 per year, which includes subscription to the newsletter. Regular meetings are held on the second Thursday of each month.*

ADVERTISING RATES

-Full page: $40, Half: $20, Sixth: $10, Bus. card size: $5
-ZX line ads (32 spaces): $0.40 or 3/$1.00
One dollar minimum, except members, who also get $1 discount per classification. Bona-fide job ads are free to members or non-members on a first come/ space available basis.(computer help-wanted ads may get preference)
All ads must be accompanied by payment (Checques payable to the Victoria Sync Assn.) and submitted camera-ready (ZX print-out or typed) two weeks or more before the second Thursday of each month.
When possible, ads will be CLASSIFIED as Work Wanted, Help Wanted, Trade/Swap, Wanted to Buy, For Sale, Play,etc.

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VICTORIA SYNC ASSOCIATION - MEMBERSHIP APPLICATION

*Please provide the following information :*
*Name,address,postal code, telephone number(s),optional age & gender and other info about yourself which you want us to know. We also want to know what equipment you have, your experience and special interests. Enclose your dues of $10.00.*

*Send to Victoria Sync Association, 942 Cloverdale Ave, Victoria B.C., V8X 2T6, or present at meeting.*

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# BOLEN BOOKS

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*Allan Parker, "AppleSoft Basic for the Business Executive" $20.95*

*Richard Haskell, "Commodore-64 Basic" $18.95*

*Richard Haskell, "IBM-PC Basic Programming" $18.95*

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*If you don't see what you want, give us the title, author & publisher, and we can order it for you.*



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# MACHINECODE CORNER
## by Craig Bird

One of the slowest things about the Sinclair is its printing. Recently I was working on a program in which I had to have very large shapes moving around the screen. Well,needless to say,the program was incredibly slow. So, I developed the program I have for you this month. This program will let you define up to 8 shapes each 4 characters wide and 4 characters long, then the shapes can be printed anywhere on the screen as fast as it takes to print only one character. The program has 3 separate routines:

1) This program will let you define a shape. To define a shape you must print the shape in the upper left corner of the screen, then use RAND USR 16518 There can be up to 8 shapes defined. To select which shape to define, a number from 0 to 7 must be POKEd into 16417. For example the following program will define a box shape to the 1st shape:

```
20 POKE 16417,0
30 PRINT "■■■■"
40 PRINT "■  ■"
50 PRINT "■  ■"
60 PRINT "■■■■"
70 RAND USR 16518
```

2) This program will print one of the 8 shapes anywhere on the screen. POKE into 16417 a number from 0 to 7 for which of the shapes is to be printed. This program is used by RAND USR 16514. When this program is used, the shape will be printed at the current print position on the screen. EG the following program will print shape number 1 at 10,10 on the screen:

```
10 POKE 16417,0
20 PRINT AT 10,10;
30 RAND USR 16514
```

3) This program will replace the just printed shape on the screen with blanks. It is much easier and faster to use this program instead of several PRINT statements. The program is used by RAND USR 16516.

USE the program in listings one to type in the numbers in listings two one at a time readings from left to right. After all the numbers have been typed in, all lines exept line 10 can be removed. Any program that uses the machine code in line 10 can now be typed in.

Included with this program is a simple game in basic below. to use the game, type in the lines in the BASIC listings below , but be sure line 10 has already been typed in by using the program in listing one. The idea of the game is to prevent the space ship coming down at you from reaching the bottom of the screen by positioning your square over it then shooting it. After you destroy it,or it reachs the bottom you will be scored. It is a simple game, but it can be used as a example of the possible uses of the machine code "shape table" program described above. To use the game, use the cursor keys for the directions,and the 9 key to shoot the space ship.

I need help!.I am running out of ideas for programs for this column. If you have a simple program you would like me to make for it let me know. Where else can you get computer programs written for free?

Craig Bird
592-5058

LISTING 1

```
 10 REM XXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXX
 20 FOR N=16514 TO 16520
 30 INPUT A
 40 SCROLL
 50 PRINT N,A
 60 POKE N,A
 70 NEXT N
```

LISTING 2

```
24   37   24   76   58   33
64   135  135  135  135  22
65   203  191  95   42   12
64   35   14   4    6    4
126  16   35   19   16   250
5    29   35   16   253  13
32   240  201  42   14   64
58   33   64   135  135  135
135  203  191  95   22   65
14   4    6    4    126  254
118  40   4    26   203  183
119  35   19   16   243  6
29   35   16   253  13   32
233  201  42   14   64   14
4    6    4    126  254  118
40   2    54   0    35   16
246  6    29   35   16   253
13   32   236  201
```

SAMPLE PROGRAM

```
 11 PRINT "PLEASE WAIT WHILE I
DEFINE THE  SHAPES"
 12 PAUSE 60
 13 CLS
 14 LET S=0
 15 POKE 16417,0
 20 PRINT "▗  ▖",,"▐▄▄▌",,"▀▀▀
▀",,"▝  ▘"
 30 LET A=USR 16516
 40 POKE 16417,1
 50 CLS
 60 PRINT "▛▀▀▜",,"▌  ▐",,"▌  ▐
",,"▙▄▄▟"
 65 LET A=USR 16516
 80 PRINT "I HAVE DEFINED THE S
HAPES. PRESSANY KEY TO PLAY"
 90 PAUSE 30000
 95 CLS
100 LET C=0
110 LET D=16
120 POKE 16418,0
130 PRINT AT 23,0;"▀▀▀▀▀▀▀▀▀▀▀▀▀▀▀▀
▀▀▀▀▀▀▀▀▀▀▀▀▀▀▀▀"
140 LET A=16
150 LET B=16
160 POKE 16417,1
170 PRINT AT A,B;
180 LET L=USR 16516
190 LET A=A+(INKEY$="6" AND A<>
16)-(INKEY$="7" AND A<>0)
200 LET B=B+(INKEY$="8" AND B<>
27)-(INKEY$="5" AND B<>0)
205 LET S=S+1
210 IF INKEY$="9" THEN PRINT AT
A+2,B+2;"▪"
220 IF INKEY$="9" THEN IF A=C A
ND B=D THEN GOTO 1000
230 PRINT AT A,B;
240 LET L=USR 16514
250 POKE 16417,0
260 PRINT AT C,D;
270 LET L=USR 16516
275 LET R=INT (RND*4)
280 LET C=C+(R=2)
290 IF C=17 THEN GOTO 2000
300 LET D=D+(R=0)-(R=1)
310 IF D<0 THEN LET D=0
320 IF D>27 THEN LET D=27
330 PRINT AT C,D;
340 LET L=USR 16514
350 GOTO 160
1000 PRINT AT 0,0;"YOU HIT HIM"
1020 PRINT AT A,B;"▗▟▙▖"
1030 PRINT AT A+1,B;"▟▀▀▙"
1040 PRINT AT A+2,B;"▟▀▀▙"
1050 PRINT AT A+3,B;"▀▀▀▀"
1055 PRINT AT 1,0;"SCORE>";S;"<"
1060 STOP
2000 PRINT AT 0,0;"HE LANDED, YO
U LOSE"
```

## GIGO FILE

*"TAX AND THE SYSTEM"*

*The Commissar now has a bulletin #40-83 for SS taxing of computers and software. The general principle is "If in doubt, tax it; otherwise tax it anyway." A bit dry, but a must for business users.*

*MRP Technology, PO Box 340128, Tampa, FL 33694 (813) 961-2595 (after 7 p.m). has a $20.00 kit for building a 64K Rampack for a ZX/TS. All parts except 14 IC's and sockets and some resistors, capacitors, diodes - this could be about $60 worth of stuff.*

*Dave Dack is looking for a cartridge that plugs into a Magnavox Odyssey 2. Sell cheap or lend him one for a while, c/o Dee.*

*We have received letters from individuals all over Canada wanting info or asking to join us. Also we have been sent some Commercial fliers, like the one from MRP. However there have been no spiffy groups offering to exchange newsletters since the New York one.*

*Berry Computers, 5344 West Banff, Glendale, AZ 85306, (602) 978-2902, has a Timex catalogue. Examples: 2068 for $169.95; 2040 for $89.95. Lots of TS1000 and 2068 software cassettes, from $3.25 per.*

*Compusa has a nice controller for $199. Works with SA400 and similar drives, including Double Sided, Double Density. They say the operating system is compatible with other computers. CP/M?*

*Thomas B. Woods, PO Box 64, Jefferson, NH,03587, (603) 586-7734 has PRO/FILE 2068, an advance over the ZX PRO/FILE. The almost 100 page manual is not ready yet, but will be available to all who buy it now at $29.95.*

*C-64 users dislike Commodore's version of MicroSoft Basic so much that they are replacing it with COMAL, a very complex language written by Borge Christianson.*

*Bill Love is alive and well nursing an old system at Barrie Ont., 56 Little Lake Drive, RR#1, (705) 737-4491.*

*'I'm afraid Dad's tied up with his new Microdrive . . .'*

==========

LAST MONTH I PROBABLY HINTED. SO THIS MONTH IS THE RESULT OF THE HINT IN HARD COPY. AND IF THAT DOESN,T MAKE SENSE, THEN MAYBE YOU SHOULD READ THE REST OF THIS.

THE BOOKS YOU BUY, AND THE MANUALS YOU READ, SOMETIMES LET YOU STRUGGLE ALONG, AND EVERY ONCE IN A WHILE YOU COME UP WITH A PROBLEM, AND NO SOLUTION TO BE FOUND.

MAYBE THIS HAS HAPPENED TO YOU; YOU WERE PLAYING "DAS-BOOT", AND THEN YOU TRIED TO LOAD IN "QUEST", OR "VU-FILE", OR "MELTDOWN", AND ALL YOU COULD GET WAS A "K" CURSOR FOR YOUR TROUBLE. BUT, YOU SAY TO YOURSELF, THEY HAVE ALL LOADED O.K. BEFORE. AND AFTER A FEW MORE ATTEMPTS, YOU LOAD IN A PROGRAM THAT YOU COPIED OUT OF A MAGAZINE, AND IT WORKS.

WHY? THERE YOU WERE SITTING CONTEMPLATING THE EARLY DEMISE OFTHE HAM-RADIO OPERATOR DOWN THE STREET FOR INJECTING SIGNALS INTO YOUR COMPUTER, OR THE NEXT DOORNEIGHBOR FOR USING POWER TOOLS AND INJECTING SPIKES INTO THE POWER LINE, NOT REALIZING THAT THE CULPRIT IS YOURSELF.

OH, REALLY? HOW COULD THAT BE? WELL, REMEMBER, THE FIRST REQUIREMENT TO LOAD "DAS-BOOT" WAS TO POKE DOWN RAM-TOP. (POKE 16389,103),(NEW). AND THEN YOU TRIED TO LOAD IN A FULL 16K PROGRAM, AND THERE WAS JUST NOT ENOUGH ROOM. BUT THE PROGRAM FROM THE MAGAZINE WAS ONLY 9K OR LESS, AND THAT IS WHY IT WENT IN.

THIS IS WHERE "RAND USR 0" IS VERY HELPFUL. IT BEATS WEAR ANDTEAR ON THE 9-VOLT JACK ON YOUR COMPUTER. IN OTHER WORDS, RAND USR 0 DOES THE SAME THING AS UNPLUGGING YOUR COMPUTER, AND PLUGGING IT BACK IN, BUT SOMETIMES A LOT EASIER, ESPECIALLY IF YOU HAVE TO RETUNE YOUR T.V. SET EVERY TIME YOU TURN OFF AND ON.

THIS PROCEDURE WILL EVEN RESET YOUR COMPUTER IF YOU HAVE A PROGRAM IN YOUR SYSTEM WHICH RESIDES "ABOVE-RAM-TOP" SUCH AS "TOOLKIT" OR "ASSEMBLER".

A SPECIAL NOTE FOR PEOPLE WITH 64K, OR 32K MEMORY.

RAND USR 0 DOES NOT, AND I REPEAT, DOES NOT ERASE THE MEMORY IN THE 8K-TO-16K AREA. THAT AREA IS AS SAFE FROM USR 0 AS CAN BE SO FEEL FREE TO CLEAR ALL OTHER MEMORY THIS WAY, AND KEEP YOUR MACHINE CODE INTACT.

FOR THOSE OF YOU WITH 16K RAMPACKS, YOU DO NOT HAVE THE 8-TO-16K AREA. YOU HAVE THE 16K-TO-32K AREA. AND IF THIS CONFUSES YOU, FEEL FREE TO PHONE ME AT 656-5879, EVENINGS, OR WEEKENDS.

WELL, THAT,S IT FOR THIS MONTH. I,LL BE BACK AGAIN NEXT MONTH WITH SOME NEW HINTS, BUT THE USR ROUTINES WILL BE ABANDONED, AS THE REST OF THEM ARE USELESS FOR MOST PEOPLE, AND SERIOUS PROGRAMMERS USUALLY KNOW THEM ANYWAY.

DAVE SKAALRUD
RAND USR 0

KNITTING PROJECT

Some time ago I challenged the membership to help write a ZX81 program capable of "charting" a knitting project. One would put in the measurements of the victim - the intended recipient of the new sweater - together with some information about stitch and row gauges. The program would then issue instructions about how many stitches to cast on, when to increase or decrease, how to bind off, etc.

To the delight of my knitting wife, I have finally started this. Somewhere in this issue you will find a listing which does actually chart out the back of a sweater with reasonable success. Next I have to do the front and sleeves. Then I will want to add modifications for different neck styles. The whole will be driven from a menu.

In the listing, the menu starts at 1500. There are not many choices on it yet, but there will be more! The essential measurements are put in through the routine at lines 1200-1390, which then returns you to the menu.

Once that is done, the instructions for the back of the sweater start at 2000. Instructions come up a few at a time, and then GOSUB 500 provides a pause, and a message "press any key to continue". This allows the user to make notes before reading the next screen.

When I get around to finishing it, I'm sure it will take Lynne much less long to make me the sweater, which will, of course, be tendered as an exhibit at an upcoming meeting!

Julian Greenwood.

```
  10 GOTO 1500
 100 LET UK=(INT (CH/4))/2+3
 110 IF CH>=44 THEN LET UK=UK+.5
 120 IF UK>9.5 THEN LET UK=9.5
 130 RETURN
 200 LET UK=(INT (CH/4))/2+4.5
 210 IF CH<36 THEN LET UK=UK-.5
 220 IF UK>10.5 THEN LET UK=10.5
 230 RETURN
 300 IF U$="C" THEN LET UK=UK+.5
 310 IF U$="F" THEN LET UK=UK+1+
INT ((CH-32)/8)/4
 320 IF U$="M" THEN LET UK=UK+1+
INT ((CH-32)/8)/2
 330 RETURN
 400 IF U$="C" THEN LET CH=CH+3
 410 IF U$="F" OR U$="M" THEN LE
T CH=CH+INT (CH/8)
 420 RETURN
 500 PRINT AT 21,0;"PRESS ANY KE
Y TO CONTINUE"
 510 IF INKEY$="" THEN GOTO 510
 515 CLS
 520 RETURN
 900 PAUSE 100
 910 CLS
 920 PRINT "IS THIS A COAT?(Y/N)
"
 930 INPUT C$
1000 PRINT "CHILD(C),FEMALE ADUL
T(F),OR MALE ADULT(M)?"
1010 INPUT U$
1015 IF C$="Y" THEN GOSUB 400
1020 IF U$="C" OR U$="F" THEN GO
SUB 100
1030 IF U$="M" THEN GOSUB 200
1040 IF U$<>"C" AND U$<>"F" AND
U$<>"M" THEN GOTO 1000
1050 PRINT "IS THIS A LARGER SWE
ATER (WORN OVER OTHER CLOTHES?(Y
/N)"
1060 INPUT Y$
1070 IF Y$="Y" THEN GOSUB 300
1080 LET BNK=(INT (CH/4))/2+2
1100 PAUSE 100
1110 GOTO 1500
1200 CLS
1210 PRINT "ENTER MEASUREMENTS
1220 PRINT "CHEST",
1230 INPUT CH
1240 PRINT CH,"SHOULDER MEAS.",
1250 INPUT SH
1260 PRINT SH,"UNDERARM LENGTH",
1270 INPUT UL
1280 PRINT UL,"SLEEVE LENGTH",
1290 INPUT SL
1300 PRINT SL,"WRIST",
1310 INPUT W
1320 PRINT W,"BICEP",
1330 INPUT B
1340 PRINT B,"STITCHES/INCH",
1350 INPUT SG
1360 PRINT SG,"ROWS/INCH",
1370 INPUT RG
1380 PRINT RG
1390 GOTO 900
1500 CLS
1510 PRINT TAB 14;"MENU"
1515 PRINT AT 3,0;"1.  ENTER MEA
SUREMENTS"
1520 PRINT AT 4,0;"2.  BACK INST
RUCTIONS"
1600 INPUT X
1610 IF X=1 THEN GOTO 1200
1620 IF X=2 THEN GOTO 2000
1700 GOTO 1600
2000 CLS
2002 LET A=CH/2*SG
2004 IF A>=INT A+.5 THEN LET A=I
NT A+1
2006 IF A<INT A+.5 THEN LET A=IN
T A
2010 PRINT "CAST ON ";A;" STITCH
ES"
2020 PRINT "RIB WITH NEEDLES 2
0 3 SIZES SMALLER THAN USED FOR
BODY OF GARMENT."
2030 PRINT "RIB K1,P1 FOR 2.5 IN
CHES OR AS DESIRED, THEN CHANGE
NEEDLES"
2040 GOSUB 500
2050 PRINT "WORK EVEN UNTIL PIEC
E  MEASURES ";UL;" INCHES"
2060 PRINT "CHECK MEASUREMENTS.
PIECE SHOULD BE ";CH/2;" ACROSS,
 AND ";UL;" LONG"
2070 GOSUB 500
2080 PRINT "SHAPE ARMHOLES"
2090 LET AR=(A-SG*SH)/2
2100 IF AR<>INT AR THEN LET SH=S
H+1
2110 LET AR=(A-SG*SH)/2
2120 LET AR1=INT (AR/4+1)
2130 LET AR2=AR-2*AR1
2140 PRINT "BIND OFF ";AR1;" ST
 AT BEG. NEXT 2 ROWS"
2150 PRINT "THEN DECR. 1 ST. EA
H END NEXT ";AR1;" ROWS"
2160 PRINT "THEN DECR. 1 ST. EAC
H END EVERY OTHER ROW ";AR2;" TI
MES"
2170 PRINT "WORK EVEN TILL ARMHO
LE IS ";UK;" INCHES"
2180 LET UKR=INT (RG*UK)
2190 IF UKR=RG*UK THEN PRINT "(
";UKR;" ROWS)"
2200 IF UKR<RG*UK THEN PRINT "(
";UKR;" OR ";UKR+1;" ROWS)"
2210 GOSUB 500
2300 PRINT "SHAPE NECK"
2310 LET SN=SG*(SH-BNK)/2
2320 IF SN>=INT SN+.5 THEN LET S
N=INT SN+1
2330 IF SN<INT SN+.5 THEN LET SN
=INT SN
2340 LET BNKS=SG*SH-2*SN
2350 IF SG<4 THEN LET K=2
2360 IF SG>=4 AND SG<=6 THEN LET
 K=3
2370 IF SG>6 THEN LET K=4
2380 IF SN/K-INT (SN/K)>=.5 THEN
 LET L=INT (SN/K)+1
2390 IF SN/K-INT (SN/K)<.5 THEN
LET L=INT (SN/K)
2400 LET L2=SN-(K-1)*L
2405 IF L2=L THEN GOTO 2430
2410 PRINT "BIND OFF ";L;" STS.
AT BEG. OF NEXT ";2*K-2;" ROWS,
AND ";L2;" STS. AT BEG. OF THE F
OLLOWING 2 ROWS"
2420 GOTO 2450
2430 PRINT "BIND OFF ";L;" STS.
AT BEG. OF NEXT ";2*K;" ROWS"
2450 GOSUB 500
2460 PRINT "FINISH BACK OF NECK
BY BINDING OFF REMAINING ";BNKS;
" STS. OR PLACING THEM ON HOLDER
."
2470 GOTO 1500
```

```
+++++++++++++++++
+               +
+ THE PIRATE,S  +
+    -CORNER-   +
+               +
+ BY D. CURRY  +
+               +
+++++++++++++++++
```

THIS MONTH,S SHEET WILL DIGRESS FROM THE USUAL. IT COULD BE TITLED -TRAVELS TO TIMEX LAND- ORTIMEX, TIMEX, WHO,S GOT THE TIMEX?

ARMED WITH AMERICAN FUNDS (CANADIAN NOT ACCEPTED HERE), THE LAST ISSUE OF SYNC, AND AN INEXPLICABLE URGE TO TOUCH A 2068, I VENTURED INTO THE SOUTHERN WILDERNESS. EVERY DAY I SCANNED THE NEWSPAPERS FOR ADVERTISING THAT WOULD LURE ME AND MY MONEY IN THE PROPER DIRECTION. I TRAVELLED AS FAR SOUTH AS SAN DIEGO AND BACK TO SACREMENTO BEFORE MY (BY NOW FERVENT) PRAYERS WERE ANSWERED. SURE ENOUGH, A LIVING, BREATHING, NOISY, AND COLORFUL 2068. IN A FIT OF EXUBERANCE I SPRUNG FOR A NEW 2040 PRINTER. WHAT COULD I DO; THE PRICE WAS RIGHT.

I WILDLY LOOKED AROUND TO FIND PROGRAMS, A MODEM, SPARE PRINTER PAPER.....AFTER ALL I HAD MONEY LEFT. BUT...NONE. AS I TRAVELLED BACK TOWARDS THE GREAT WHITE NORTH I AGAIN CHECKED PAPERS, STORES, AND MAGAZINES FOR SOURCES. NOT UNTIL PORTLAND, WHERE I HAPPENED UPON A COUPLE OF FRIENDLY SINCLAIR USERS, DID I GET SOME ANSWERS. OTHER THAN THOSE BUSINESSES THAT ADVERTISE IN SYNC OR TS USER (DEALING PRIMARILY BY MAIL) THERE ARE NO READILY AVAILABLE SOURCES FOR TIMEX, AS I HAVE SAID BEFORE IN THIS COLUMN, SUBSCRIBE, SUBSCRIBE.
THE ONE PERSON I CONTACTED IN OREGON CITY, CAN SUPPLY SOME GOODIES, BASED ON AVAILABILITY. HIS NAME AND ADDRESS FOLLOW. HE IS A MEMBER OF THE OREGON CITY USERS GROUP AND THE PORTLAND GROUP.

ROD GOWEN
RMG ENTERPRISES
1418 1/2 7TH ST.
OREGON CITY, OREGON
97045

655-7484

THE OTHER CONTACT I MADE WAS WITH A MEMBER OF THE PORTLAND USER GROUP.

KEVIN FOWLER
5854 N.E. MULTNOMAH
PORTLAND, OREGON
97213

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BOTH GUYS ARE REALLY FRIENDLY, WERE EAGER TO HEAR OF OUR EFFORTS WITH THE CLUB.

SO,... THE 2068 IS EVERYTHING WE,VE HEARD. BRIEFLY... SOUND AND COLOR ARE GOOD. I FOUND IT DISCONCERTING TO HAVE THE COMPUTER MAKE NOISES. THE COLOR REALLY ENHANCES THE PROGRAMS. IT,S A REAL TOOL FOR SHOWING OFF. THOSE WITH C64 OR TI-99 EXPERIANCE, IT,S VERY MUCH THE SAME. THE KEYBOARD, THE AUTO REPEAT KEYS, THE EXTRA COMMANDS, THE JOYSTICK PORTS; ALL GREAT. THE DIFFERANCE BETWEEN THE CHEVY AND THE CADILLAC.

BITS AND BYTES
**********

17000 IS AN OVERBYTE.

DAVE HUSTON AND I DECIDED TO BLOW $15.00 U.S. AND ORDER THE LITTLE KEYBOARD ADVERTISED IN SYNC UNDER FILESIXTY OR THE NEW NAME - SECONDBASE. IT TOOK 3 WEEKS TO COME, THE WAS NO DUTY, AND AS FAR AS I,M CONCERNED IT,S THE NEXT BEST THING TO HOT PORRIDGE. SEE IT AT THE NEXT MEETING. THENAME OF THE CITY WHERE SECONDBASE RESIDES (NOT MENTIONED IN THE AD) IS ALTOONA, PA.

I DID MANAGE TO BUY SOME NEW AND USEFUL BOOKS FOR BOTH THE ZX81 AND THE 2068, SO IN FUTURE COLUMNS WE,LL HAVE THINGS TO DISCUSS.

I HAVE NOT LAID HANDS ON ANY NEW PROGRAMS, BUT I HEAR THAT THE BIRD BROS. WORD PROCESSING PROGRAM IS ABOUT READY. SO I,M LOOKING FORWARD TO GETTING A COPY.

THAT,S IT FOR THIS MONTH - SEE YOU AT THE MEETING.

P.S. I,LL BRING THE ISSUE OF COMPUTING ELECTRONICS THAT HAS THE ARTICLE ON THE QL. IT LOOKS IMPRESSIVE.

## RADIO SHACK MC10

Last week Dee & I searched through the memory on the MC-10 and found some addresses which will help the MC-10's potential to become known. Included in this issue is a program which demonstrates the graphics potential of this machine. We also found that machine code is possible, and that there are commands which execute machine code which aren't in the manual the MC-10 comes with.

To execute a machine code program one can use the command EXEC, followed by the starting address of the machine code program. This is similar to the Sinclair USR, though it has some differences.

The MC-10 has its own USR function, but with this command you must poke the addresses 16918 and 16919 with the starting address of the machine code. Also the USR function is preceded by a number in brackets which can be used by the machine code being executed.

On the MC-10, when you poke addresses, the most significant byte comes first instead of last.

I would be interested to hear of other discoveries people have made on the MC-10.

Dale Bird.

Try this: (on the MC-10)

```
10 REM "■■119"■■49

15 N=1
20 EXEC 17227
30 FOR DELAY = 0 TO 400: NEXT
32 PRINT N
35 EXEC (65445) N,1
40 EXEC 17233
50 FOR DELAY = 0 TO 400: NEXT
55 N=N+1
60 POKE 17228,N
80 GOTO 20
CSAVE "ZX REM"
```

**Figure 1: extensions to Sinclair Basic**

**Channels:**
There are seven channels: the keyboard (k), the screen (s), the ZX printer (p), the text RS232 interface (t), the binary RS232 interface (b), the network (n) and the Microdrive (m).

**Streams:**
These are given by # number where the number can be between 1–15.

**Statements:**

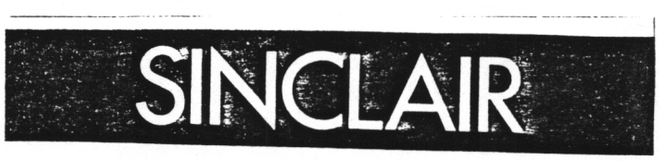
| | |
|---|---|
| CAT y | Lists all the files in the cartridge in Microdrive y. This shows the name of the cartridge and the number of remaining kilobytes. |
| CAT #z;y | Sends catalogue of cartridge in Microdrive y to stream z. |
| CLOSE #stream | Unlinks any channel from the specified stream. |
| ERASE"m";v;"[name]" | Erases the file with the specified name from the cartridge in Microdrive y. |
| FORMAT"m";y;"[name]" | Prepares a blank cartridge in Microdrive y for use by Basic. |
| FORMAT"n";x | Sets the network station number to x. |
| FORMAT"t";x | Sets the baud rate for the RS232 interface to x. |
| INKEY$#stream | Returns a single character as a string if one's available or the null string " " if no character's available from the stream. |
| INPUT#stream; variable | Inputs the variable from the specified stream. |
| LOAD* channel options | Loads the programs, data or code from the specified channel. Channels 'b', 'n' and 'm' are the only ones that can be used. All options usually available with LOAD are available with LOAD*. |
| MERGE* channel options | The same as LOAD except that it doesn't delete old program lines to make way for new ones with the same program line. |
| MOVE sources to destination | Moves data from source to destination. These can be either stream numbers or channels. |
| OPEN#stream, channel | Links the specified channel to the specified stream to allow Basic input or output to that channel. |
| PRINT#stream ... | Outputs the print sequence (. . .) to the specified stream. |
| SAVE* channel options | Saves the program, data, or code to the specified channel. Only channels 'b', 'n' or 'm' can be used. All facilities available with SAVE are available with SAVE*. |
| VERIFY* channel options | The same as LOAD except that data is not loaded but is compared with the data already there. |

A 32-bit computer for $499? Clive Sinclair, creator of the $99 Sinclair computer which was introduced three years ago, plans to unveil such a system this summer. Dubbed the Sinclair QL -- Quantum Leap -- it, like the Apple MacIntosh, is based on Motorola's 68000 microchip. Included in the $499 price will be 128K RAM -- expandable to over one megabyte -- and two microfloppy disk drives, presumably 3½", each with a capacity of 100K. Also bundled are word processing, spreadsheet, database and graphics software programs, along with a full keyboard with five function keys. Color graphics are supported by the system, although a video-display unit is extra. The QL will be incompatible with every other microcomputer on the market, however, with its proprietary QDOS operating system. The system is touted as being multiuser and multitasking.

Should the unit come close to what it claims to possess for the price, the computer industry's price/performance expectations will be completely restructured. (Asian Computer Monthly, March 1984; 22 Wyndham St., Hong Kong.)

If only one person on the net owns a Microdrive then there's a very useful facility called broadcast. What it does is allow one station to send data or programs to all the others on the network and not have to wait for them to input it.

When something is sent on the broadcast channel it's always sent to station 0. So if data's to be sent, the command OPEN#"n";0 is used. Any stations that are reading on the broadcast channel can get what ever is sent on it from any other station. The same applies to programs. Should a user have a program that he thinks everyone should have, then he can save it; SAVE*"n";0 and anyone who enters LOAD*"n";0 will receive it. If no-one loads the program, the sender's computer is not held up as before, but is ready for use straight away as the program is lost.



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